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## (54) Gaming machine with hold feature

(57) A "Fruit" machine includes a hold feature which allows all the reels to be rotated during the next game. Controllable buttons 11-13 are provided for displaying at areas 7, 8, 9 a representation of one or more of the symbols displayed on the reels 4-6 at the end of a game and to hold the symbol(s) during the next game when the reels once more are rotated. The pay-out mechanism is adapted to award a prize into hopper 15 not only when the symbols present upon at least one predetermined line of symbols on the reels forms a predetermined combination, but also if the symbols obtained when one or more the symbols present on the line are substituted by the symbol in the corresponding controllable symbol displaying area forms a predetermined combination. The controllable buttons 11-13 may flash at the end of random selected games to offer the hold facility. If the hold facility is offered at the conclusion of a game in which the hold feature was already present then by pressing the start button 13 the player may hold onto the previously held symbols displayed at areas 7-9 or press buttons 11-13 to override the held symbols and replace them by symbols on the reels. The reels may be mechanical or simulated reels generated and displayed on a cathode ray display under the control of a microprocessor. The hold facility may be offered on one, two or three of the reels.

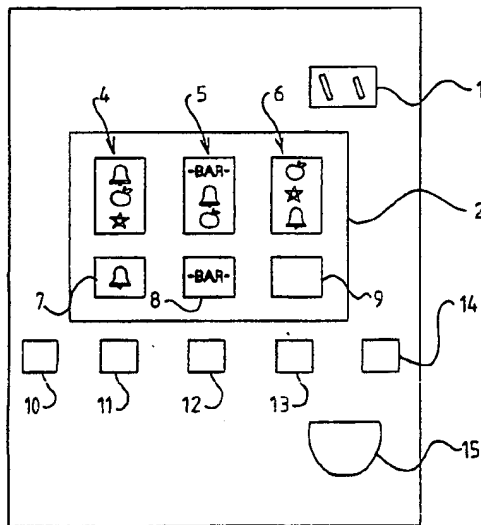


FIG 1

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

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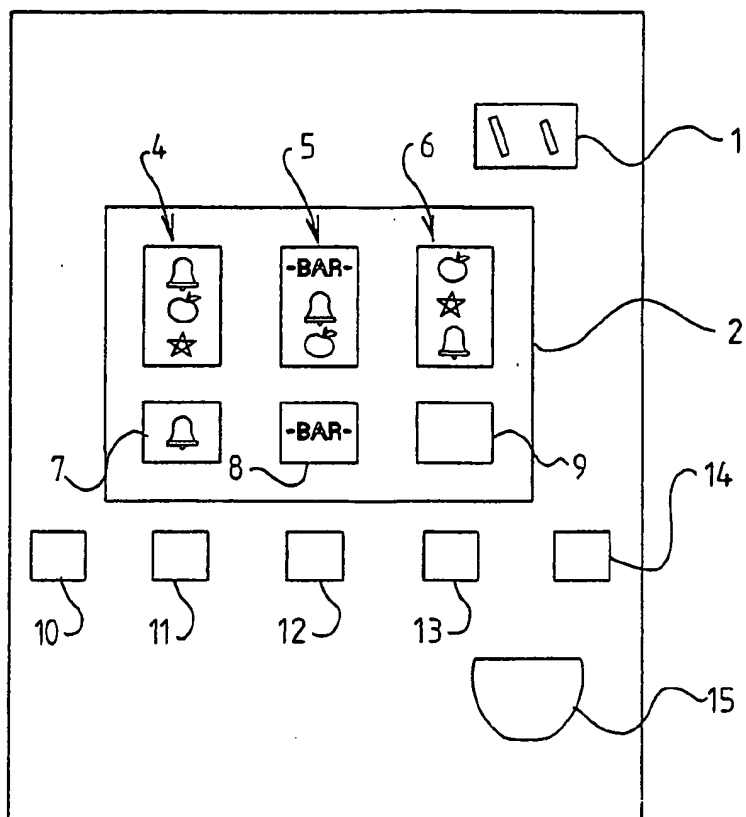


FIG 1

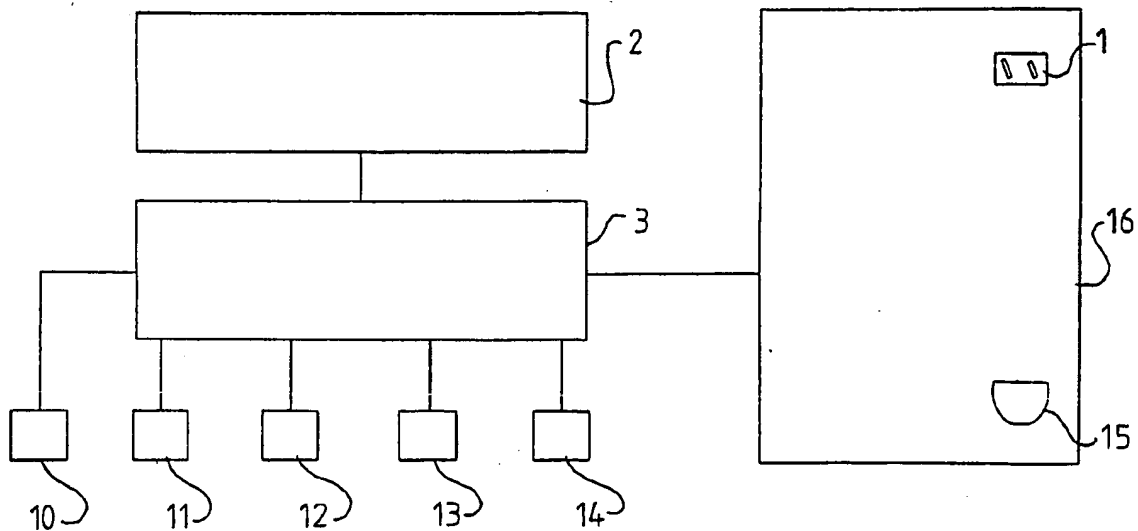


FIG 2

"Improvements in or relating to a coin token or credit-freed machine"

THE PRESENT INVENTION relates to a coin or token or credit-freed machine, such as an amusement-with-prizes machine or a gaming machine.

It has been proposed previously to provide a coin, token or credit-freed machine, comprising an amusement-with-prizes machine or a gaming machine in a form which is known as a "Fruit Machine". In such a machine a plurality of reels are provided, (typically three reels) carrying symbols on their outer peripheries, or a visual representation of such reels is provided. In operation of the machine the reels are caused to rotate, and the reels come to rest with symbols, on the peripheries of the reels aligned with a "Pay" line. If a predetermined combination of symbols is present on the "Pay" line, a prize is awarded which may comprise cash or tokens.

The present invention relates to a machine of this type and seeks to provide an improved machine having a novel feature which will make the machine attractive to potential players.

According to this invention there is provided a coin or token or credit-freed machine comprising a plur-

ality of reels carrying symbols on their periphery, or means adapted to represent such reels, the reels being rotatable and displaying one or more symbols when stationary, there being controllable means for displaying a representation of a predetermined symbol displayed on one or more of said reels, the machine incorporating a pay-out mechanism adapted to award a prize when the symbols present upon at least one predetermined line of symbols displayed by the reels when stationary form a predetermined combination (or one of a plurality of predetermined combinations), the pay-out mechanism being adapted to award a prize also if the combination obtained when one or more of the symbols present on the line are substituted by the symbol in the corresponding controllable symbol displaying means.

Preferably means are provided adapted to represent the reels, said means comprising a display screen.

Conveniently the display screen is cathode ray tube display screen.

Advantageously the or each said representation is displayed.

The machine may be controlled by means of a micro-processor.

Preferably the controllable means for displaying a representation of a predetermined symbol are actuated by means of a button.

Conveniently a separate controllable means for displaying a representation of a predetermined symbol is provided for each of the said reels.

Advantageously the said controllable means for displaying a representation of a predetermined symbol are only operational during selected games.

Preferably means are provided for selecting in a random manner the games during which the said controllable means are to be activated.

In order that the invention may be more readily understood, and so that further features thereof may be appreciated, the invention will now be described, by way of example, with reference to the accompanying drawings in which

FIGURE 1 is a diagrammatic front view of a machine in accordance with the invention, and

FIGURE 2 is a block diagram of the main operative parts of the machine of Figure 1.

Referring to the drawing, a machine in accordance with the invention is contained within a housing, the front face of which is visible. The machine is illustrated as being provided with a combined coin and token slot 1 adapted to receive coins or tokens to enable the machine to be played. The machine may, however, be a credit-freed machine actuated by means of a card carrying a magnetic stripe or other electronically readable information to provide credit to the machine.

The machine includes a cathode ray tube display screen 2 of a conventional form. The cathode ray tube is associated with an appropriate driving arrangement incorporating, for example, a pre-programmed micro-processor 3 and the cathode ray tube is adapted to display representations of portions of the peripheries of three reels 4,5,6 which carry, on their peripheries, symbols

traditional to this type of machine, in the form of bells, stars, plums etc.

The cathode ray display screen 2 is provided with three further areas 7,8,9, located beneath the representation reels 4,5,6 and each capable of displaying symbols as present on the exterior periphery of the reels.

Located on the front face of the housing are various control buttons comprising a "Start" button 10, located to the lefthand side of the housing, three "Hold" buttons 11,12,13 each substantially aligned with a respective representation of a reel 4,5,6 on the cathode ray display screen 2, and a "Cancel" button 14. All of the buttons may be of transparent material and may have electric lamps therein, so that, under the control of the micro-processor, the buttons may be illuminated or may "flash". A pay-out hopper 15 is also provided on the front of the machine. The coin and token slot 1, and the pay-out hopper 15 form part of a coin and token-handling unit 16 which is connected to the micro-processor so that the described machine may be activated when a coin or token is inserted in the slot 1, and so that appropriate prizes can be paid out.

When the machine is to be utilised a coin or token is inserted in the slot 1 to establish a "credit" within the machine. A "credit meter" may be provided, as is conventional. The game is started by pressing the "Start" button 10. The micro-processor then follows a cycle of operation in which the display on the cathode ray display screen 2 shows the reels 4,5,6 rotating. The reels stop sequentially and if the combination of symbols appearing on a predetermined line (for example the line comprising the lower-most symbol on each reel) is a predetermined combination, then a prize is awarded

and is paid into the pay-out hopper 15.

On occasions, at the end of a game as thus described, a "Hold" facility is offered. To indicate that such a facility is being offered the "Hold" buttons 11, 12, 13 may be illuminated or flash for example. The "Hold" facility may only be offered on one of the three reels in which case only the respective one of the three "Hold" buttons would flash, but alternatively two buttons or all three buttons may flash if the facility is offered on two or all three reels. A player may then press one or more of the "Hold" buttons and the symbol displayed on the respective representation of the reel, on the "Pay" line will then be "copied" by the micro-processor, into the area 7, 8 or 9 lying beneath the reel. The next game may then be commenced by pressing the Start button. The representations of the reels will again give a visual impression that the reels are rotating, and that the reels stop sequentially. In determining whether a prize is to be awarded, the symbols on the "Pay" line are considered, and the situation that would arise if the symbol on the "Pay" line on each reel is substituted by the symbol appearing in the area 7, 8 or 9 beneath the respective reel is also considered. This is effected by the micro-processor. If it is found that a winning combination exists if one or more of the symbols contained in the areas 7, 8 or 9 is transferred up to the appropriate position on the "Pay" line of the representation of the reel above that area, then the symbol is automatically transferred to that position, enabling the pay-out mechanism associated with the pay-out hopper 15 to operate and provide an appropriate monetary or token prize.

The "Hold" feature may be offered in games that are selected in a totally random way. Thus a random generator is provided to generate signals when the

"Hold" feature is to be offered. It is possible, therefore, that a "Hold" feature may be offered immediately at the conclusion of a game in which the "Hold" feature was already present. This may be considered to be a "Hold After Hold" feature. If this situation arises, the player may merely press the "Start" button 10, in which case the symbols that were previously held in the areas 7, 8 and 9 will again be held. It is possible, of course, that a player may have held, in two of the areas 7,8 and 9, two symbols which represent the major part of a winning line which offers a very high pay-out, and the player may therefore wish to retain those symbols. Alternatively, the player may press one or more of the flashing "Hold" buttons to over-ride the symbols held in the areas 7, 8 or 9 in the previous game with the symbols then appearing on the "Pay" line on the representations of the reels 4, 5 and 6. If this is done and the player then changes his mind, he may press the "Cancel" button 14. The symbols originally present in the area 7, 8 and 9 will then reappear enabling the player then either to press the "Start" button 10 or to press a fresh selection of the "Hold" buttons 11, 12 and 13.

If, at the end of the game in which the "Hold" feature has been operational, a new game is to commence in which the "Hold" feature is not offered, then the symbols present in the boxes 7, 8 and 9 will be erased, and the boxes will remain blank until the "Hold" feature has again been offered and one or more of the "Hold" buttons 11,12,13 have been pressed.

It is to be appreciated, therefore, that the game, as described above, whilst being similar to a conventional "Fruit Machine" game does have the significant difference that a symbol which is "held" is retained, and is then substituted for the symbol appearing



on the Pay line of the respective reel if substituting that symbol gives rise to a prize being awarded or to an enhanced prize being awarded. This significantly increases the real value of the "Hold" facility.

Whilst the invention has been described with reference to one particular example of a game embodying the invention it is to be appreciated that the embodiments of the invention may incorporate other features which are conventional to "Fruit Machines" such as the well-known "Nudge" feature.

Whilst the invention has been described with reference to a machine in which representations of reels are generated and displayed on a cathode ray display, it is to be appreciated that the invention may be embodied as a game which incorporates mechanical reels, the areas of display 7, 8 and 9 being embodied either by a mechanism, such as three small reels which are indexed to an appropriate position in a mechanical manner, or an illuminated display in which light is selectively caused to pass through an appropriate representation of a symbol. However, whilst a mechanical version of the invention may be embodied it is preferred to utilise a machine having the described cathode ray display screen, and a driving arrangement incorporating an appropriately programmed micro-processor and an associated memory, as shown in the block diagram of Figure 2.

The cathode ray display screen may, of course, be replaced by a liquid crystal display screen on the tube.

CLAIMS:

1. A coin or token or credit-freed machine comprising a plurality of reels carrying symbols on their periphery, or means adapted to represent such reels, the reels being rotatable and displaying one or more symbols when stationary, there being controllable means for displaying a representation of a predetermined symbol displayed on one or more of said reels, the machine incorporating a pay-out mechanism adapted to award a prize when the symbols present upon at least one predetermined line of symbols displayed by the reels when stationary form a predetermined combination (or one of a plurality of predetermined combinations), the pay-out mechanism being adapted to award a prize also if the combination obtained when one or more of the symbols present on the line are substituted by the symbol in the corresponding controllable symbol displaying means.
2. A machine according to Claim 1 wherein means are provided adapted to represent the reels, said means comprising a display screen.
3. A machine according to Claim 2 wherein the display screen is cathode ray tube display screen.
4. A machine according to Claim 2 or 3 wherein the or each said representation is displayed.
5. A machine according to any one of the preceding Claims controlled by means of a micro-processor.
6. A machine according to any one of the preceding Claims wherein the controllable means for displaying a representation of a predetermined symbol are actuated by

means of a button.

7. A machine according to any one of the preceding Claims wherein a separate controllable means for displaying a representation of a predetermined symbol is provided for each of the said reels.

8. A machine according to any one of the preceding Claims wherein the said controllable means for displaying a representation of a predetermined symbol are only operational during selected games.

9. A machine according to Claim 8 wherein means are provided for selecting in a random manner the games during which the said controllable means are to be activated.

10. A coin or token or credit-freed machine substantially as herein described with reference to and as shown in the accompanying drawings.

11. Any novel feature or combination of features disclosed herein.